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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,699	09/29/2003	Shigeru Fukuda	117342	7437

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EXAMINER

SCHILLING, RICHARD L

ART UNIT	PAPER NUMBER
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1752

DATE MAILED: 12/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

K/671699

Applicant(s)

Fukuda

Examiner

R L Schilling

Group Art Unit

1752

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 11-8-04
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-17 is/are pending in the application.
- ☐ Of the above claim(s) 5-17 is/are withdrawn from consideration.
- ☐ Claim(s) is/are allowed.
- ☐ Claim(s) 1-4 is/are rejected.
- ☐ Claim(s) is/are objected to.
- ☐ Claim(s) are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☒ The drawing(s) filed on 9-29-03 is/are acceptable objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____
 - ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 9-29-03
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) The invention was described in (1) an application for patent, published under Section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the

invention was made.

Claims 1-4 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Bando et al. Bando et al. (see particularly paragraphs 108, 109, 115-118; Examples 1-4) disclose intermediate transfer members comprising polyamide resins and carbon black wherein the carbon black used is commercially available carbon blacks wherein most of those specifically disclosed (18 out of 31) have volatile components of at least 3.5% by weight. All of the disclosed carbon blacks in Bando et al. have pH values less than 5 as required by the instant claims. The carbon blacks are used at 10-50% by weight, preferably 12-30% by weight, based on polyamide resin. Examples 1-4 in Bando et al. use special black 4 as used in applicants' working Examples 1-5 in the specification. Therefore, Bando et al. discloses transfer members with polyamide resins and carbon blacks as set forth in the instant claims at concentrations which encompass the required concentrations of the instant claims. Examples 1-4 in Bando et al. use special black 4 of about 20 parts per 100 parts polyamide resin. However, since Bando et al. discloses that the preferred range of carbon black is 12-30 parts per 100 parts polyamide resin, it would be obvious to one skilled in the art to slightly increase the concentration of special black 4 in the working

Examples of Bando et al. to adjust the resistivity of the intermediate transfer members.

The comparative Examples in the specification have been considered but are unconvincing as to patentability. Comparison Example 1 shows that polyamide layers with 20% carbon black provide unacceptable results as compared to polyamide layers with more carbon black as in Examples 1-5. However, comparative Example 1 disperses the carbon black in an apparatus using the pressure of 100 MPa while Examples 1-5 use pressures greater than 150 for a higher degree of dispersion. Comparative Example 1 in the specification using special black 4 at 20% by weight produces unacceptable results due to insufficient dispersion of the carbon black. The polyamide layers containing 20% special black 4 in working Example 1 of Bando et al. produces acceptable results by dispersing special black 4 using ball mill and stirring rather than the apparatus of applicants' working Examples which is disclosed as not providing acceptable results with pressures less than 150. Therefore, the working Examples in the specification are directed to the criticality of using certain minimum pressures in the particular apparatus disclosed in applicants' specification for dispersing carbon black and do not show any unexpected results in regard to concentrations of carbon blacks in polyamide transfer members in Bando et al. which are finely

dispersed using different apparatus and which are disclosed in Bando et al. as providing acceptable results. Therefore, the comparisons in the specification between Example 1 and comparison Example 1 is not representative of a comparison with the closest prior art of Example 1 in Bando et al. using carbon black dispersed by ball milling and stirring to provide acceptable results.

2. Kanetake '750, Kanetake et al. '054, Kusyanagi et al. and Hara et al. are cited of interest in the art as disclosing intermediate transfer members comprising polyamide resins and carbon blacks with pH values less than 5 and volatile contents of at least 3.5% by weight used in concentrations encompassing the concentrations of the instant claims. Hara et al. and Kusyanagi et al. specifically use special black 4.

3. The requirement for restriction is repeated and made FINAL. A search for the transfer members of the elected claims does not require a search of the method of dispersing of the non-elected claims since the prior art cited above disclose that the transfer members may be made by other dispersion techniques.

A search for the transfer member composition of the elected claims also does not require a search of the apparatus of the non-elected claims.

4. The prior art submitted by applicants has been

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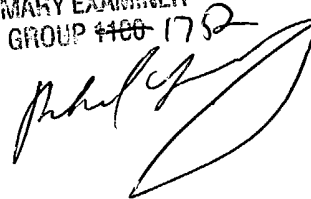
considered.

5. Any inquiry concerning this communication should be directed to Mr. Schilling at telephone number (571) 272-1335.

RLSchilling:cdc

December 7, 2004

RICHARD L. SCHILLING
PRIMARY EXAMINER
GROUP 1400-1752

A handwritten signature in black ink, appearing to read 'Richard L. Schilling', is written over the printed name and title. The signature is stylized and cursive.